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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/506,916	09/03/2004	Jens Erik Sommerlund	1175/72960	6999

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EXAMINER	
THROWER, LARRY W	
ART UNIT	PAPER NUMBER
1791	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/506,916	SOMMERLUND ET AL.	
	Examiner	Art Unit	
	LARRY THROWER	1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2008 and 23 March 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendments filed November 14, 2008 and March 23, 2009 have been entered. Claims 1, 3-4, 6-7 and 13-14 are amended; claims 17-23 are new. Claims 1-23 are under examination.

Election/Restrictions

2. Upon further consideration, the previously imposed restriction requirement has been withdrawn.

Claim Objections

3. Claim 7 is objected to because of the following informalities: The claim ends with the phrase "such as." Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-4, 7, 8, 10, 13-16, 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over BINGHAM et al. (US 3,042,975) in view of AUBERRY et al. (US 5,032,330) and AUBERRY et al. (US 3,965,517).

Regarding claim 1, BINGHAM et al. teaches a method for molding soles of rubber material and shoe welts on a shoe upper using a molding apparatus to make shoes having a welt on a molded outer sole (a method for molding soles and shoe welts on shoe uppers by means of a mold so as to provide the finished shoe with a welted appearance) [col.1, lines 10-14; col. 2, lines 20-22]. As shown in Figure 7, the molding apparatus comprises of a last 22 made of metal supporting a shoe upper 10 (said mold including a last, upon which a shoe upper is arranged), a bottom plate 24 mounted for movement up and down (a lower mold part being vertically movable in relation to the upper mold between an open and closed mold position) and a ring mold member 26 (an upper mold part) extending around the periphery of the last [col.2, lines 20-25; Figure 7]. Ring member is split diametrically and each part is mounted for movement toward and away from last 22 (the upper mold part divided along a longitudinal middle plane and thus including two halves being laterally movable in relation to a lower mold part between an open and a closed mold position) [col.2, lines 27-29]. BINGHAM does not teach that the soles are molded from plastic material like polyurethane.

A- BINGHAM teaches in Figures 3 and 7 welt 14x having an inner outline substantially corresponding to the outline of the lower side section of the shape of the shoe upper which corresponds to the position of the welt on the finished shoe.

B- BINGHAM teaches that the welt is first adhered to a blank sole, then used with the blank in the mold so the welt with the blank is attached and molded to the shoe upper (welt is placed in the mold in the open position of the mold) [col.1, lines 53-54, 58].

C- BINGHAM teaches the ring member (upper mold part) has an inwardly projecting, overhanging flange 28 at its upper edge (an upper projection on each of the halves extends over the welt) [col.2, lines 25-27; Figure 7].

D- BINGHAM teaches in Figure 7 whereby the projecting flange 28 of the upper mold part 26 supports the welt 14x in such a manner that the portion of the welt is tilted inwards and downwards to bring the inner face of the welt into a sealing engagement with the lower side section of the shoe upper 10. BINGHAM does not teach of a support face on the upper face of the lower mold part extending and getting close to the projecting flange in order to support the welt as required in claim 1 D.

E- BINGHAM does not teach that plastic material is supplied to the cavity of the mold before or after the lower mould part is moved into its closed position.

AUBERRY et al. (5,032,330) teaches a method for manufacturing footwear by providing a mold with a cavity 28 (cavity of the mold) where plastic material like polyurethane (molding soles of plastic material like polyurethane) is injected into the space in order to form a sole and adhere the welt to the shoe upper held by a last (the shoe sole is molded in a manner known by supplying a plastic material to the cavity of the mold as required in claim 1E) [col.2, lines 26-30; abstract; Figure 3]. AUBERRY (5,032,330) does not teach of a lower mold part comprising a support face on the upper face to support the welt and co-act with a pressure surface on the lower support face of the projection flange of the upper mold part as required in claim 1D.

AUBERRY et al. (3,965,517) teaches in Figure 3 of an apparatus for a method to manufacture footwear using a lower mold member 18 with an upper face supporting one

surface of welt 12 while the other face of welt is also supported by the lower face of projection 10 so that the welt touches the shoe upper 3 [Abstract; Figure 3].

At the time of invention, it would have been obvious to one of ordinary skill in the art to use the teachings of plastic material like polyurethane and the lower mold part containing a cavity where the plastic material is injected into the mold to form a sole as taught by AUBERRY et al. (5,032,330) in the method as taught by BINGHAM et al. in order to mold soles of plastic material like polyurethane and shoe welts on shoe uppers, making different types of footwear like shoes or sandals. Plastic materials like polyurethane aid in adhering strongly the welt between the shoe upper and the sole, making a more unified footwear that would last longer and survive different weather conditions. Furthermore, at the time of invention it would have been obvious to one of ordinary skill in the art to use the teachings of the lower mold part as taught by AUBERRY (3,965,517) wherein the lower mold part has an upper surface or face which extends and supports the welt on one surface in the teachings of modified BINGHAM such that the other surface of the welt is being supported by the lower face of the projection flange of the upper lower part, in order for the welt to tilt upward and/or downward to bring the inner face of the welt into sealing engagement with the lower side section of the shoe upper when both mold parts are moved toward the last supporting the shoe upper and form a closed position of the mold. The placement of the welt onto the side section of the shoe upper is better controlled when the welt is being supported directly by surfaces of movable upper and the lower mold parts in order to bring the welt to a secure position with side section of the shoe upper so that when

plastic material like polyurethane is injected into the mold cavity to form a sole, it does not overflow through the welt and seen on the other side of the shoe.

Regarding claims 2 and 17, the teachings as referenced in claim 1 apply. As seen in Figure 7 of BINGHAM, the inner end face of the welt has planar surface with an undercut.

Regarding claim 3, the teachings as referenced above in claim 1 apply. Also, see Figure 7 of BINGHAM.

Regarding claims 4, 14, 18, 20 and 22, BINGHAM et al. teaches the support surface being a face of a circumferential recess in the upper face of the lower mould part [fig. 7], but is silent as to the angle formed by the cross-sectional view of the face. However, absent evidence of unexpected results obtained from a 20-40 degree angle formed by the cross-sectional view of the face, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected a suitable angle to effectively form a shoe. The optimization of a range or other variable within the claims that flows from the "normal desire of scientists or artisans to improve upon what is already generally known" is *prima facie* obvious. *In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003).

Regarding claims 7 and 19, BINGHAM teaches that a welt is made of soft flowable rubber (soft material like rubber) [col.1, lines 53-54].

Regarding claim 8, the teachings as referenced above in claim 1 apply. In Figure 3 of AUBERRY et al. (3,965,517) shows the lower mold part 18 supporting directly on its surface welt 12 which reads on limitations of claim 8.

Regarding claim 10, the teachings as referenced above in claim 1 apply. BINGHAM teaches of a shoe welt and that it is substantially annular [Figure 3]. In Figure 7, the surface of the welt that touches the side portion of the shoe upper is vertical.

Regarding claim 13, the teachings as referenced in claim 1 apply. Modified BINGHAM teaches of a mold for practicing the method as requested in claim 1 and meets the requirements of claim 13.

Regarding claim 15, the teachings as referenced in claim 1 apply. Modified BINGHAM with AUBERRY et al. (3,965,517) teaches where the projection of upper mold 26 of BINGHAM extends beyond the side wall when used with the lower mold part 18 as taught by AUBERRY et al. (3,965,517) in Figure 3.

Regarding claim 16, the teachings as referenced in claim 1 and 15 apply. The inner surface of the projection flange of upper mold is parallel with the supporting surface of the lower mold part.

Regarding claim 21, the support face acts to support the welt upwards inclining towards the lower portion of the shoe upper [Figure 7].

6. Claims 5, 9, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over BINGHAM et al. (US 3,042,975) in view of AUBERRY et al. (US 5,032,330) and AUBERRY et al. (US 3,965,517), as applied to claims 1-3, 7, 8, 10, and 13, 15-16 above, and in further view of BYRNE et al. (US 1,530,297).

Modified BINGHAM teaches a method for molding soles of rubber material and shoe welts on a shoe upper using a molding apparatus to make shoes having a welt on a molded outer sole as referenced in claim 1.

Regarding claim 5, modified BINGHAM is silent to teaching of an auxiliary supporting sole attached to a welt. BRYNE et al. teaches a method in Figure 3 of an insole (auxiliary sole) attached to an annular welt 5. It would have been obvious to one of ordinary skill in the art to use the teachings of an insole attached to an annular welt in the method as taught by modified BINGHAM in order to support the annular rubber welt onto an auxiliary structure like an insole during the molding method and secure the position of the welt on the molding apparatus thus better adhering the welt with the shoe upper and sole.

Regarding claim 9, the teachings as referenced in claim 1 and 5 apply. BYRNE teaches that welt 5 is attached to insole through means of an adhesive and further secured onto the shoe upper with means of anchor tacks or pins 7 as shown in Figure 5 [col. 2, lines 94-100]. It would have been obvious to adhere the welt onto an insole or auxiliary sole through means of adhesive and/or pins in order to better secure the welt onto the auxiliary sole.

Regarding claim 11, the teachings referenced in claims 5, 9 and 10 apply.

Regarding claim 12, the teachings referenced in claims 1, 5, 9 and 10 apply. The view of the welt 14x as seen in Figure 7 of BINGHAM is interpreted to be a cross sectional view of the welt as it is used in the method. The welt corresponds substantially

to a rectangle cross-sectional shape (shoe welt characterized in that its cross-sectional shape corresponds substantially to a rectangle).

7. Claims 6 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over BINGHAM et al. (US 3,042,975) in view of AUBERRY et al. (US 5,032,330) and AUBERRY et al. (US 3,965,517), as applied to claims 1-3, 7, 10, 13-15 above and in further view of OURS et al. (US 4,651,444).

Modified BINGHAM teaches a method for molding soles of rubber material and shoe welts on a shoe upper using a molding apparatus to make shoes having a welt on a molded outer sole as referenced in claim 1.

Regarding claim 6, modified BINGHAM is silent to that the auxiliary sole is made of pervious fabric with a plurality of perforations.

OURS et al. teaches in Figure 4 a sole 4 with perforations 8 [col.4, lines 24-26]. It would have been obvious to one of ordinary skill in the art to use the teachings of OURS regarding a sole with perforations in the teachings of modified BINGHAM where the auxiliary sole attached to the welt has perforations in order to serve as a passages for the plastic at the time of injection thus adhering strongly to the sole and the shoe upper forming a uniform sturdy footwear like boots or sandals. It would have been obvious to one of ordinary skill in the art to modify the diameter of the perforations on the auxiliary sole depending on the density of materials used to make a shoe and the kind of a shoe so that all layers are adhered strongly with the shoe upper and welt.

Regarding claim 23, OURS et al. is silent as to the diameter and spacing of the perforations. However, absent evidence of unexpected results obtained from the claimed diameter and spacing ranges, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected a suitable diameter and spacing to effectively form passages to allow the plastic to adhere to the sole and shoe upper, as taught by OURS et al.

Response to Arguments

8. Applicant's arguments filed November 14, 2008 have been fully considered but they are not persuasive.

- Applicant argues that none of the cited documents teach or suggest that the inner portion of the welt is tilted inwards and downwards to bring the inner face of the welt into sealing engagement with the lower side section of the shoe upper. This argument has been considered but is not persuasive. Fig. 7 of Bingham et al. shows welt 14x having a "tilted" (i.e., departing from the true vertical) end portion which sealingly engages the lower side section of shoe upper 10. Thus, Bingham et al. meets this element of amended claim 1.
- Applicant further argues that both of the Auberry patents teach away from tilting the inner portion of the welt. This argument has been considered but is not persuasive. The Auberry patents are silent as to an inner portion of the welt being tilted inwards and downwards to bring the inner face of the welt into sealing engagement with the lower side section of the shoe upper. For a reference to teach away, the reference

must suggest that the claimed combination should be avoided as undesirable or ineffective. See *In re Haruna*, 249 F.3d 1327, 1335 (Fed. Cir. 2001); *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). The Auberry patents make no such suggestion. The Auberry patents do not constitute a teaching away an inner portion of the welt being tilted inwards and downwards to bring the inner face of the welt into sealing engagement with the lower side section of the shoe upper because the references do not criticize, discredit, or otherwise discourage this feature.

- Applicant further argues that the Auberry patents do not teach the welt being placed in the mold in the open position of the mold. This argument has been considered but is not persuasive. As described above, Bingham et al. teaches that the welt is first adhered to a blank sole, then used with the blank in the mold so the welt with the blank is attached and molded to the shoe upper (welt is placed in the mold in the open position of the mold) [col.1, lines 53-54, 58]. Thus, Bingham et al. meets this element of amended claim 1.
- Applicant finally argues that Bingham et al. teaches away from tilting in the portion of the welt inwards and downwards to bring it into sealing engagement with the side section of the upper when the lower mold part is moved into its closed position. This argument has been considered but is not persuasive. As noted above, for a reference to teach away, the reference must suggest that the claimed combination should be avoided as undesirable or ineffective. Bingham et al. makes no such suggestion. Fig. 7 of Bingham et al. shows welt 14x having a "tilted" (i.e., departing from the true vertical) end portion which sealingly engages the lower side section of

shoe upper 10 when the mold is in its closed position. Thus, Bingham et al. meets this element of amended claim 1.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LARRY THROWER whose telephone number is 571-270-5517. The examiner can normally be reached on Monday through Friday from 9:30AM-6PM est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina A. Johnson can be reached on 571-272-1176. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Larry Thrower/
Examiner, Art Unit 1791

/Christina Johnson/

Supervisory Patent Examiner, Art Unit 1791